

In the Claims

Please amend the following claims as follows:

1. (Thrice Amended) A method of qualitative and quantitative analysis of microbial population(s) comprising:

providing a sample containing microorganisms,

contacting the microorganisms present in the sample with at least one specific probe to form a probe-target complex using *in situ* hybridization in whole cells, wherein the specific probe recognizes a RNA target sequence,

extracting the hybridized specific probes from the probe-target complex in the contacted sample by adding a denaturing agent to denature the probe-target complex, and

detecting the extracted probes and measuring the amount thereof or their respective amounts to provide the qualitative and quantitative analysis of the microorganisms in the sample.

8. (Twice Amended) A method according to Claim 7, wherein fixation of the cells is achieved by incubation of the cells in a fixation solution of less than 10% paraformaldehyde for 3 to 12 hours at 4°C.

17. (Thrice Amended) A method according to Claim 1, wherein said detecting and measuring the amount of the extracted probes includes detection and quantification of a label associated with or incorporated into the extracted probes, wherein the label is a radioactive, chemiluminescent or fluorescent label.

19. (Thrice Amended) A method according to Claim 1, wherein said method is used in combination with a process for triggering an alarm in connection with quality, safety and or sanitary monitoring of the product from which said sample has been obtained.

REMARKS

Reconsideration of claims 1-30 is respectfully requested. Claims 1, 8, 17 and 19-23 are amended to address the rejections under 35 U.S.C. §112, second paragraph in paragraph 5 of the Office Action.